Amendments to the Claims:

1 – 13 (canceled)

14. (currently amended) A protective alloy layer for protecting a component against corrosion and oxidation at high temperatures, comprising:

0.5 to 2% rhenium (% by weight);

16 to 18% chromium (% by weight);

~~15 to 21% chromium (% by weight);~~

24 to 26% cobalt (% by weight);

9 to 11.5% aluminum (% by weight);

0.05 to 0.7% yttrium (% by weight) or a metal selected from the group consisting of: scandium and the rare earth elements;

0.0 to 1% ruthenium (% by weight);

remainder nickel and manufacturing related impurities; and

wherein the protective layer contains at most 6% by volume of chromium-rhenium precipitates, and the concentration of cobalt relative to the concentration of the other elements in the alloy suppresses the formation of a ý phase of the alloy thereby avoiding a peak in a coefficient of thermal expansion of the alloy.

15. (currently amended) The protective layer as claimed in claim 14, comprising:

1 to 1.8% rhenium (% by weight);

~~16 to 18% chromium (% by weight);~~

9.5 to 11% aluminum (% by weight); and

0.3 to 0.5% yttrium (% by weight) or a metal selected from the group consisting of: scandium and the rare earth elements.

16. (previously presented) The protective layer as claimed in claim 15, comprising:

1.5% rhenium (% by weight);

17% chromium (% by weight);

25% cobalt (% by weight);

10% aluminum (% by weight); and

0.4% yttrium (% by weight) or a metal selected from the group consisting of scandium and the rare earth elements.

17. (canceled)

18. (currently amended) The protective layer as claimed in claim 14 ~~17~~, wherein a thermal barrier coating is applied to the protective layer.

19. (currently amended) A high temperature gas turbine engine component, comprising:

a nickel or cobalt based super alloy substrate; and

a corrosion and oxidation protection layer arranged on the substrate, comprising:

0.5 to 2% rhenium (% by weight),

16 to 18% chromium (% by weight);

~~15 to 21% chromium (% by weight);~~

24 to 26% cobalt (% by weight),

9 to 11.5% aluminum (% by weight),

0.05 to 0.7% yttrium (% by weight) or a metal selected from the group consisting of: scandium and the rare earth elements;

0.0 to 1% ruthenium (% by weight),

remainder nickel and manufacturing related impurities; and,

wherein the protective layer contains at most 6% by volume of chromium-rhenium precipitates, and the concentration of cobalt relative to the concentration of the other elements in the alloy suppresses the formation of a ý phase of the alloy thereby avoiding a peak in a coefficient of thermal expansion of the alloy.

20. (currently amended) The high temperature turbine component as claimed in claim 19, wherein the protective layer comprises:

1 to 1.8% rhenium (% by weight);

~~16 to 18% chromium (% by weight);~~

9.5 to 11% aluminum (% by weight); and

0.3 to 0.5% yttrium (% by weight) or a metal selected from the group consisting of: scandium and the rare earth elements.

21. (previously presented) The high temperature turbine component as claimed in claim 20, wherein the protective layer comprises:

1.5% rhenium (% by weight);

17% chromium (% by weight);

25% cobalt (% by weight);

10% aluminum (% by weight); and

0.4% yttrium (% by weight) or a metal selected from the group consisting of scandium and the rare earth elements.

22. (canceled)

23. (previously presented) The high temperature turbine component as claimed in claim 22, wherein a thermal barrier coating is applied to the protective layer.

24. (withdrawn) A process for producing a high temperature corrosion and oxidation protection layer, comprising:

providing a powder comprising:

0.5 to 2% rhenium (% by weight),

15 to 21% chromium (% by weight),

24 to 26% cobalt (% by weight),

9 to 11.5% aluminum (% by weight),

0.05 to 0.7% yttrium (% by weight) and/or an equivalent metal selected from the group consisting of: scandium and the rare earth elements,

0.0 to 1% ruthenium (% by weight); and

remainder nickel wherein the powder used has a trace element content of less than 0.5%, comprising, carbon, oxygen, nitrogen and hydrogen:

in that the carbon content is less than 250 ppm,

in that the oxygen content is less than 400 ppm,

in that the nitrogen content is less than 100 ppm, and

in that the hydrogen content is less than 50 ppm;

spraying the powder;

vaporizing the powder; and

depositing the vaporized powder onto a substrate.

25. (withdrawn) The process as claimed in claim 24, wherein the substrate is a nickel or cobalt based superalloy.

26. (withdrawn) The process as claimed in claim 25, wherein the powder comprises:

1 to 1.8% rhenium (% by weight);

16 to 18% chromium (% by weight);

9.5 to 11% aluminum (% by weight); and

0.3 to 0.5% yttrium (% by weight) or a metal selected from the group consisting of: scandium and the rare earth elements.

27. (withdrawn) The process as claimed in claim 26, wherein the powder comprises:

1.5% rhenium (% by weight);

17% chromium (% by weight);

25% cobalt (% by weight);

10% aluminum (% by weight); and

0.4% yttrium (% by weight) or a metal selected from the group consisting of scandium and the rare earth elements.